

**Office of Information Technology**  
**C.O.M.P.A.S.S.**  
**(Citizen Online Maintaining Plates Annually, Swiftly and Simply)**

**OVERVIEW**

The purpose of this project is to provide a means for citizens to renew their vehicle registrations via the Internet. This service will improve the convenience of this process for the State's vehicle owners.

Functionality will be added to the Legacy system as well as the MAAP development that is currently underway to provide Internet access by registrants to the Division of Motor Vehicle (DMV) vehicle registration system for renewal of vehicle registrations.

**BUSINESS WORK FLOW**

Citizens currently renew their vehicle registrations via mail or in person. There are 196 Towns/Cities that are registered as Municipal Agents which allows them to process the State portion of the registration, otherwise the State portion is processed at the Department of Safety (DOS). Registrations processed by Municipal Agents are either mailed to the DOS for processing, or the original MAAP system is updated by the online Municipal Agents.

**DATA INPUT**

Currently a renewal extract file is created the fourth Friday of each month. Each record represents a registration expiring two months from execution of job month and includes fleet vehicles expiring three months from execution.

A sub-set of this extract file will be used as input. The input file will contain all active records for the participating Municipal Agents who have made an agreement with the State to allow online renewals via the Internet. The active records must:

- Expire in two months from execution of job month;
- Not have body style equal to Motor Home (MTRHM);
- Not have weight greater than 8,000 pounds;
- Not have a list price equal to \$1;
- Have the allowed plate type (PASS, IPASS, CPASS, ICPAS); and
- Relate to registrants who are age 18 or older prior to the renewal month.

Registrants who have "delinquent" conditions (e.g., short slips, credit memos, protested checks, suspensions, etc.) at the time of the extract will be coded with a "Y" in the Delinquent-Flag field. Registrations with a list price of \$1 at the time of the extract will also be coded with a "Y" in the Delinquent-Flag field. Records with "Y" in the Delinquent-Flag field will not be available for renewal over the Internet.

For leased vehicles, the last name and date of birth information will be extracted from the second owner information.

The total Town fees due will be calculated by adding the Town fees captured in the extract record (which is a result of the (list price x millage) + \$1 Town Clerk fee) and adding the additional Town fees as specified in the agreement with the State.

### **RENEWAL EXTRACT (106 CHARS)**

LAST-NAME	21 Alphanumeric characters
DATE-OF-BIRTH-OWNER	8 Numeric characters (YYYYMMDD)
VEHICLE-ID-NBR	17 Alphanumeric characters (Last 4 characters will be requested)
REG-PLATE-TYPE	5 Alphanumeric characters
REG-PLATE-NBR	8 Alphanumeric characters
REG-EXPIRATION-DATE	8 Numeric characters
REG-FEE AMT-PAID	7 Numeric characters (State Fee) (Two right-most characters are cents. Zero (0) fill to the left.)
TOTAL-PERMIT-FEE-PAID	7 Numeric characters (Town Fee) (Two right-most characters are cents. Zero (0) fill to the left.)
DELINQUENT-FLAG	1 Alphanumeric (Y = Delinquent)
WEIGHT	7 Numeric characters
LIST-PRICE	7 Numeric characters
MILLAGE-RATE-1	3 Numeric characters
MONTHS-1	2 Numeric characters
MILLAGE-RATE-2	3 Numeric characters
MONTHS-2	2 Numeric characters

### **SYSTEM OUTPUT**

Each normal business day (Monday- Friday), a file will be generated containing all input data fields in sequence by last name within Municipal Agent for all registrations renewed online since the last normal business day.

### **TOWN CLERK DATABASE FILE (167 CHARS)**

TOWN-NAME	32 Alphanumeric characters
LAST-NAME	21 Alphanumeric characters
DATE-OF-BIRTH-OWNER	8 Alphanumeric (YYYYMMDD)
VEHICLE-ID-NBR	17 Alphanumeric characters
REG-PLATE-TYPE	5 Alphanumeric characters
REG-PLATE-NBR	8 Alphanumeric characters
REG-EXPIRATION-DATE	8 Numeric characters
REG-FEE AMT-PAID	7 Numeric characters (State Fee) (Two right most characters are cents. Zero (0) fill to the left.)
TOTAL-PERMIT-FEE-PAID	7 Numeric characters (Town Fee) (Two right most characters are cents. Zero (0) fill to the left.)
DELINQUENT-FLAG	1 Alphanumeric (Y = Delinquent)
WEIGHT	7 Numeric characters

LIST-PRICE	7 Numeric characters
MILLAGE-RATE-1	3 Numeric characters
MONTHS-1	2 Numeric characters
MILLAGE-RATE-2	3 Numeric characters
MONTHS-2	2 Numeric characters
TRANSACTION-NO	17 Alphanumeric characters
TRANSACTION-DATE	8 Alphanumeric characters (YYYYMMDD)
CREDIT-CARD-NO	4 Numeric characters (Last 4 digits of credit card number)

The ‘Delinquent-Flag’ field will be updated either manually via the web by the Business Office, or automatically by producing a file from the legacy system (or the individual Town/City software vendors) containing only the changes and transmitting them to the OIT Web Development. The file layout is as follows:

### **DELINQUENT FLAG FILE (31 CHARS)**

VEHICLE-ID-NBR	17 Alphanumeric characters
REG-PLATE-TYPE	5 Alphanumeric characters
REG-PLATE-NBR	8 Alphanumeric characters
DELINQUENT-FLAG	1 Alphanumeric character (Y = Delinquent)

### **APPLICATION/BUSINESS LOGIC**

#### **Rules and Conditions**

1. The Town/City must be registered as a Municipal Agent in order to participate in Citizen Online Registration Renewal. All 196 registered Municipal Agents will be eligible for participation.
2. Vehicle registration renewal by the public (excluding Corporations) via the Internet will be performed for both the Town/City portion and State portion. Town/City only or State only processing via the Internet will not be allowed at this time.
3. Only vehicle registration renewals with no other modifications (e.g., address changes) will be permitted.
4. Citizens will be allowed to renew their registration five business days prior to the month it expires and all days during the renewal month until the fifth to the last business day of that month..
5. Registrants must be at least 18 years of age before the renewal month.
6. Registrants must not be considered “delinquent” by either the State or the Municipal Agent. Should a registrant have outstanding revenue memos (e.g., short slips, credit memos, protested checks, suspensions, etc.) or Town/City related issues (e.g., overdue parking tickets), he/she would be regarded as “delinquent”. The State and participating Municipal Agents will have the ability to flag a registrant’s record who becomes “delinquent” during their renewal month, thus prohibiting them from renewing their registration over the Internet. If a citizen is considered “delinquent” at the time the renewal extract is created, that citizen will be prohibited from renewing their registration over the Internet.

7. It will be the responsibility of the State and the Municipal Agents to flag “delinquent” records, in order to insure that “delinquent” registrants are not allowed to renew their registrations online.
8. Vehicles with a body style of “Motor Home”, or with a weight greater than 8,000 lbs., or with a list price on the State’s system of \$1, cannot be renewed by the public via the Internet.

9. The following plate types can be renewed by the public via the Internet:

PASS (passenger plates)	IPASS (passenger initial plates)
CPASS (moose plates)	ICPAS (moose initial plates)

10. Fleets with the allowed plate types may be renewed via the Internet – one vehicle at a time.

11. Fee settlement can only be accomplished using a MasterCard or Visa credit cards.

12. Citizen Online Registration Renewal will be implemented by June 1, 2004.

## **Citizen Online Registration Renewal Process**

### **I. Citizen Procedures**

When a registrant accesses the web site, an informational screen will be displayed describing the process, rules, and conditions. On the next screen, the citizen will be asked to choose a Town/City name of residence. If the Town/City name is not a participant, the Town/City name will not appear in the selection list.

The citizen will then be asked if the legal and mailing addresses are accurate on the current paper copy of their registration before proceeding. Since address changes are not permitted, the citizen will be warned that they must not proceed if either address is not correct. This is important because the State will mail the renewal to the registrant using the address as it appears on the registration.

The citizen will then be asked if they have outstanding Town/City or State obligations. If so, they will be warned that they must not proceed. The citizen will then be asked for the renewal month of their registration. Registrations can be renewed online from the last five business days of the month prior to their registration month until the fifth to the last business day of the month of their registration month.

A list of frequently asked questions (FAQs) will be available to the citizen. This list will be limited to no more than five questions. A help desk phone number (as yet to be determined) will also be displayed for help regarding vehicle registration renewal via the Internet. The hours that the helpdesk is available will also be noted (currently 8:15 A.M. – 4:15 P.M.).

The next screen will prompt the citizen to enter:

- Plate Type
- Owner's last name;
- Owner's date of birth;
- Last four (4) characters of the vehicle identification number (VIN); and
- Plate number.

All five (5) fields must match those in a record stored in the DOS input file, in order for the registration record to be available for renewal via the Internet. Whenever any editing limitation is encountered throughout the renewal process, the citizen will be directed to contact their Town/City clerk to process the registration renewal.

The next screen will display the Town/City name and all five fields entered from the prior screen along with the Town/City fees, State fees, convenience fee and total of all fees.

The next screen will prompt the citizen for credit card information . The citizen will be asked to enter the three (3) digits found on the back of the credit card (CVV) along with their billing address zip code, both of which add further security. The citizen will also be asked to enter their e-mail address to be used to send a confirmation to the citizen. The e-mail address will not be stored.

The next screen will contain a confirmation of the transaction which the citizen will be asked to print.

## **II. Municipal Agent and State Procedures**

In order to participate in COMPASS, the Municipal Agent will be asked to enter into an agreement with the State. A computer with a modem and a phone line are the minimum equipment requirements. All fees collected by the Town/City when renewing registrations will be identified in the agreement. It will be the responsibility of the Town/City to notify the State in advance when these fees change.

The Legacy and MAAP applications will produce a sub-set of the registration renewal extract file and FTP this file to the OIT Web Development every month.

Each month and during the month, it will be the responsibility of the participating Municipal Agents to flag the renewal records of all registrants who are considered to be “delinquent” on a Town/City level. The State will also have the ability to flag the records of any registrants who are “delinquent” on a State level. If available, an electronic file will be accepted from the Towns/Cities and the State to periodically update the delinquent flags.

Registrants who are “delinquent” at the time of the renewal extract, or who become “delinquent” during the renewal period will not be allowed to renew their registration over the Internet.

When a citizen successfully renews a registration online, the registration record will be flagged so as to eliminate the possibility of processing a duplicate renewal transaction.

Each normal business day (Monday- Friday), all participating Municipal Agents will receive an electronic file via e-mail which lists the information described in SYSTEM OUTPUT for all registrations renewed online since the last normal business day. The State will receive the entire list for all participating Municipal Agents.

It will be the responsibility of the Municipal Agent to contract with their software vendor if they choose to import the electronic file sent to them daily as input into their local system.

Each business day:

1. The Municipal Agent will enter (or receive electronically) the renewal transactions into their local system;
2. The State will enter the renewal transactions into the legacy system; and
3. The State will print and mail registrations and decals to all citizens who renewed their registrations via the Internet.

The State must key these transactions and mail the registrations and decals to the citizens within 24 hours of receipt of the information, as it is imperative that the renewals are processed immediately. This data entry process will be scheduled to be automated after the new MAAP system is implemented.

If a charge is protested, PaymenTech will negotiate with the issuing bank on behalf of the State. It is estimated that about 85% of the time, no charge-back occurs. When PaymenTech can not satisfy the protest, they will turn to the State for corroborative evidence. The State will then be asked to produce a re-creation of the transaction from the Rita Server logs and from the application logs. PaymenTech does not require any special security or processes to prove the integrity of the re-created transaction. In some cases, the State will successfully disprove the allegations and at other times a charge-back will result. Charge-backs are deducted from the account from which the credit card fees were deducted. Municipal Agents will be responsible for processing their own charge-backs.

If a citizen successfully renews a registration over the Internet and is found to be “delinquent” under conditions established by the Town/City, the Municipal Agent will be responsible for resolving the delinquency.

If a citizen successfully renews a registration over the Internet and is found to be “delinquent” under conditions established by State, the State may choose to suspend the registration using the process currently in place.

### **III. Financial/Business Office Procedures**

The Business Office will be responsible for manually updating a citizen’s delinquent flag during their renewal period (which will remove the citizen’s ability to renew their registration online) when the citizen has outstanding short slips, credit memos, or protested checks.

The DOS will import the registration renewal output file into the Town Clerk database application. All Internet transactions will be stored in this database. The Town Clerk database will also be modified to assist the DOS in performing the required revenue accounting and auditing procedures.

A unique merchant ID will be assigned to the DOS for Internet registrations. The credit card statements are summarized by merchant ID. In the legacy system, the renewals will be coded using a new payment code of “I”, designating Internet credit card payment; and the financial reports will be modified as needed.

When a registration is renewed online, the Town/City and DOS receive the full amount of the cost of the renewal. All Town/City fees for vehicle registration renewal will be collected and dispersed to the respective Town/City – this includes the Municipal Agent fee. Municipal Agents will not be responsible for the additional processing fees charged for credit card transactions. All funds will be deposited into the appropriate bank accounts within two (2) business days of processing the renewal.

The Town/City renewal fee will be processed as one transaction and deposited to the corresponding merchant ID account. The State renewal fee will also be processed as one transaction and deposited to the State’s merchant ID account.

At the end of each month (last working day of the month), the State's Zero Balance Account (into which the deposits are made) will be debited for additional processing fees charged for credit card transactions processed by each merchant ID. A separate amount will be debited for each merchant ID. The DOS will submit a cash receipt with a decrement equal to the total amount of the additional processing fees. It is the responsibility of the DOS to check the amounts deducted for additional processing fees by calculating the fees due and comparing them to what was billed.

PaymenTech has an application that the DOS and Municipal Agents can use to view and download all of the transactions by merchant ID# for a given date range, as well as execute a variety of other administrative functions. The file is downloaded as a text file and can be imported into Excel.

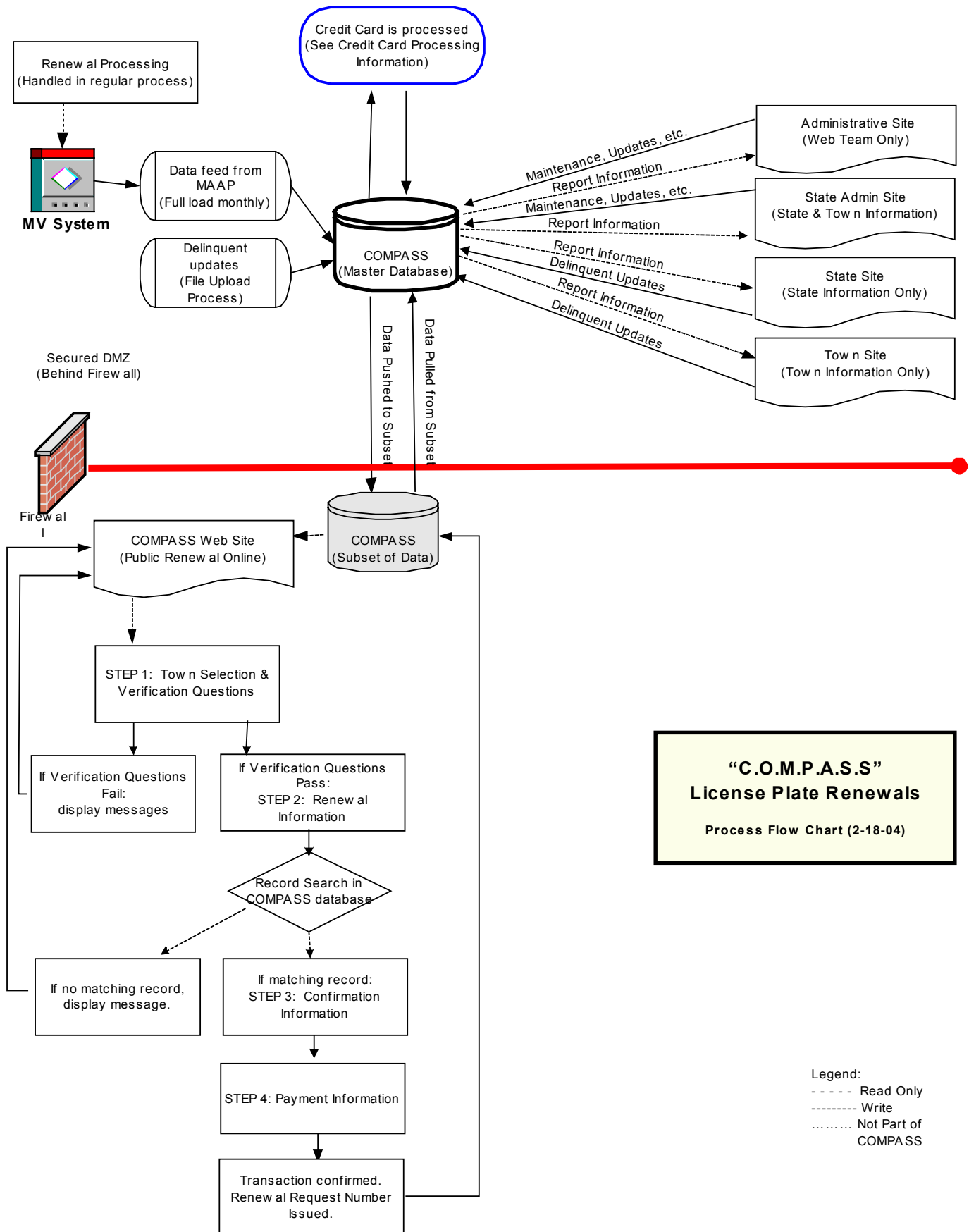
Internet credit card funds will be processed the same as other credit card funds coming in through the Fleet ACH.

#### **IV. Associated Costs and Fees**

A \$4,400 maintenance and support fee for the Rita Server may be apportioned among all agencies using the Rita Server. This fee should be minimal.

Each Town/City will be responsible for the one time fee of \$43.75 for a merchant Ids into Rita Server.

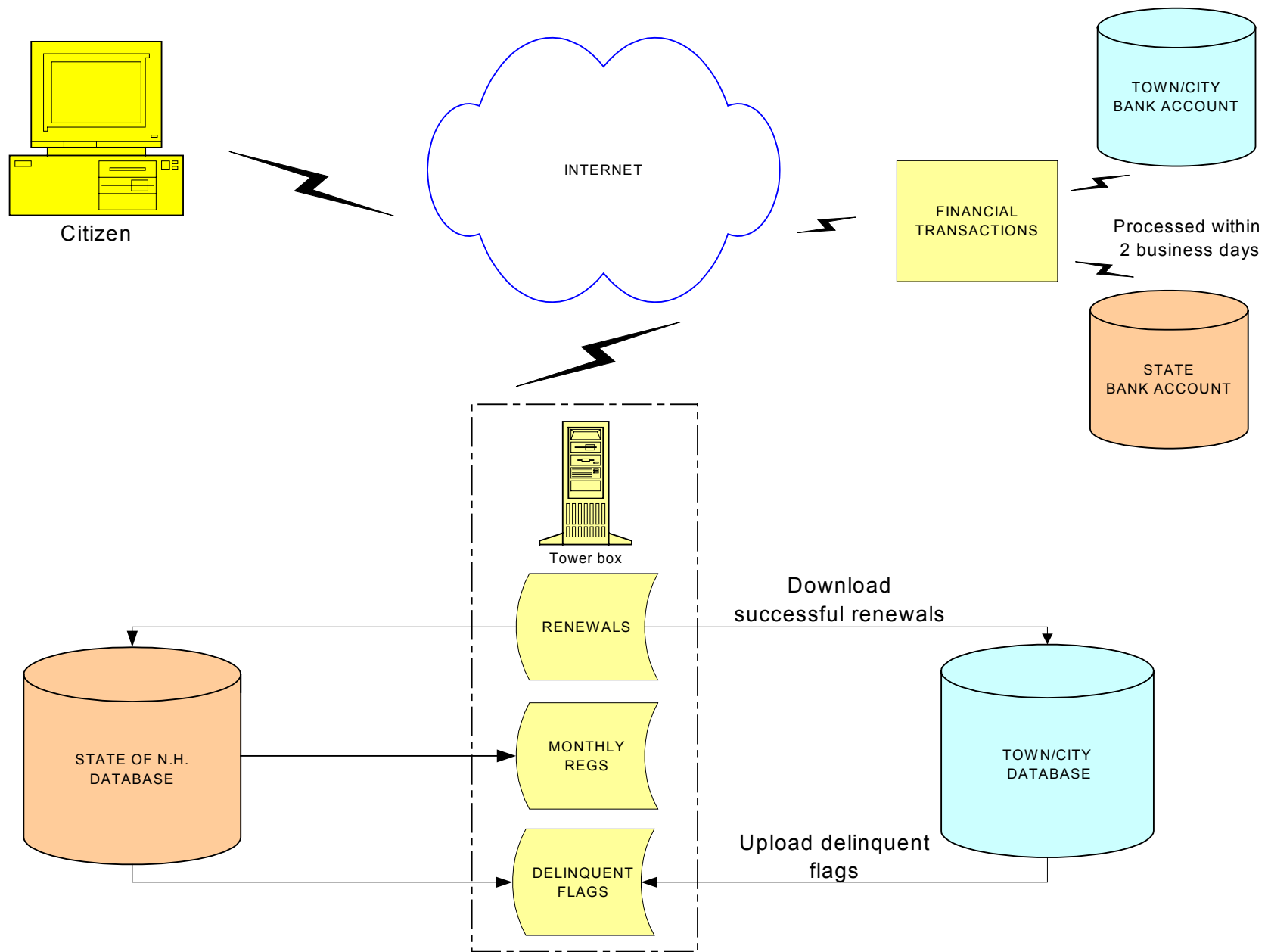


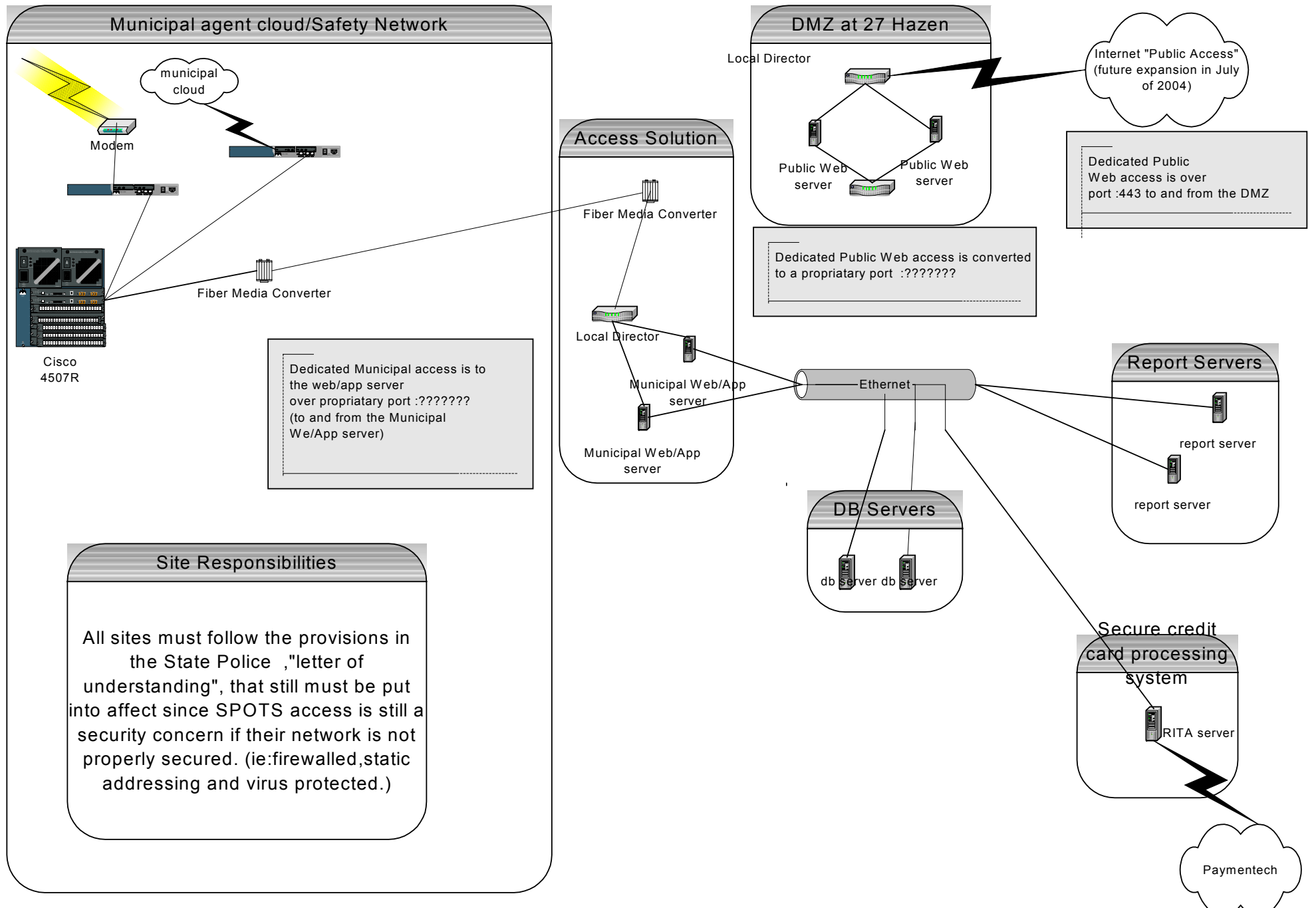


The following diagrams depict:

1. A general overview of the COMPASS information flow.
2. COMPASS connection method is via dedicated frame relay circuit to the Safety network through the municipal agent frame cloud. Traffic will be filtered by access lists and then allowed to access “only” the COMPASS server over a predefined port of our choosing.
3. COMPASS connection method is via the internet to the Sun Network VPN Solution using the client software. They will then log into the VPN concentrator and start a secure session which will only have access to the COMPASS server with encryption from end-to-end.
4. COMPASS connection method is via the State’s dial-up solution to the Sun Network VPN Solution using the client software. They will then log into the VPN concentrator and start a secure session which will only have access to the COMPASS server with encryption from end-to-end.

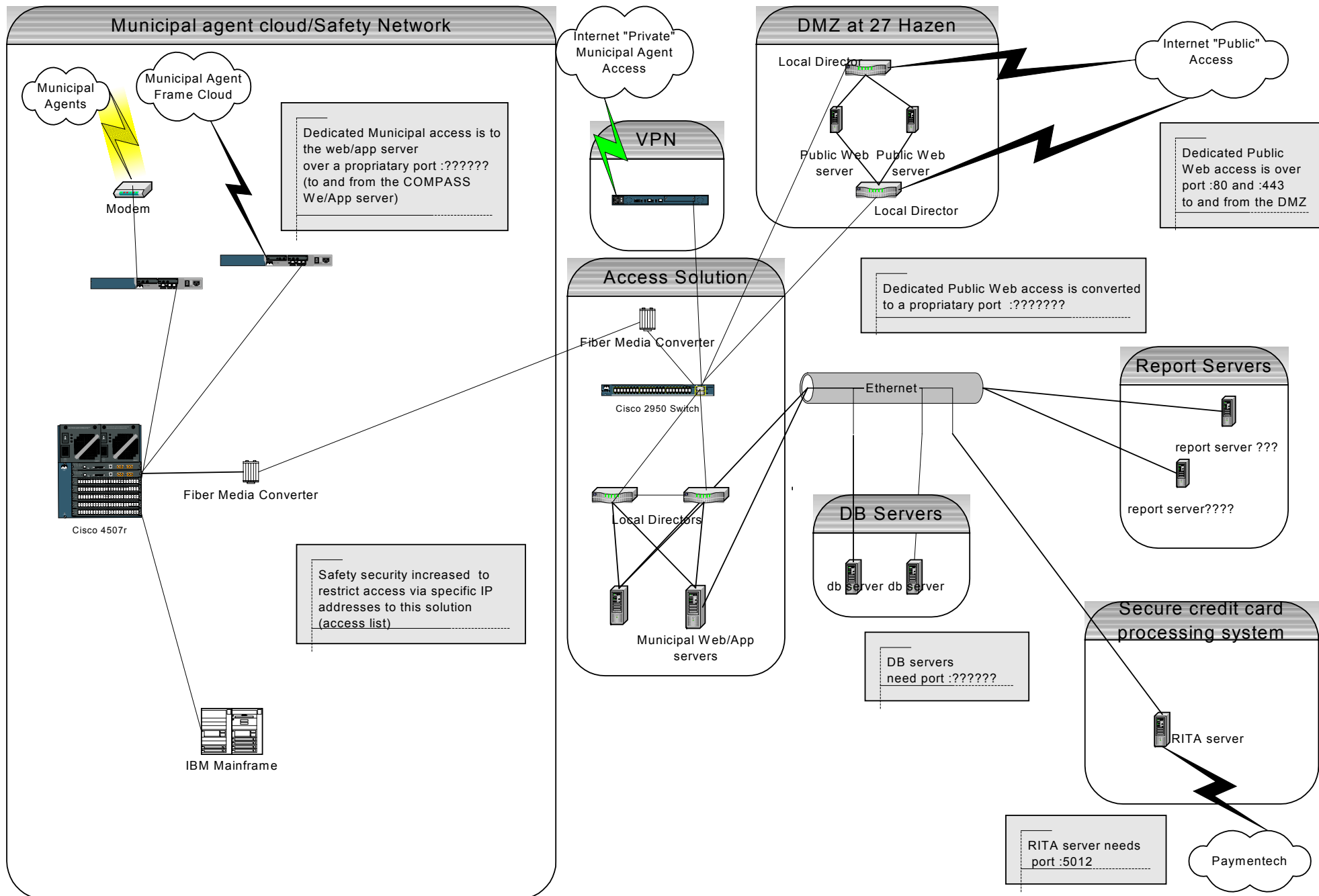
The above referenced COMPASS project section is the “internal access” that is only available to the municipal agents for setting the flags for citizen online renewals. This will access only the internal web server and all access to said servers must be made from computers and networks with appropriate levels of fire walling and virus protection.





## State of NH COMPASS Project Hazen Drive

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Created: 3/12/04	3/12/04	Revised By: Jad Flewelling	No.: 1 of 1	Print Date: 3/18/2004



## State of New Hampshire COMPASS project (vpn connectivity)

Created by: OIT, IT Operations, Network Architecture

File Name: COMPASS

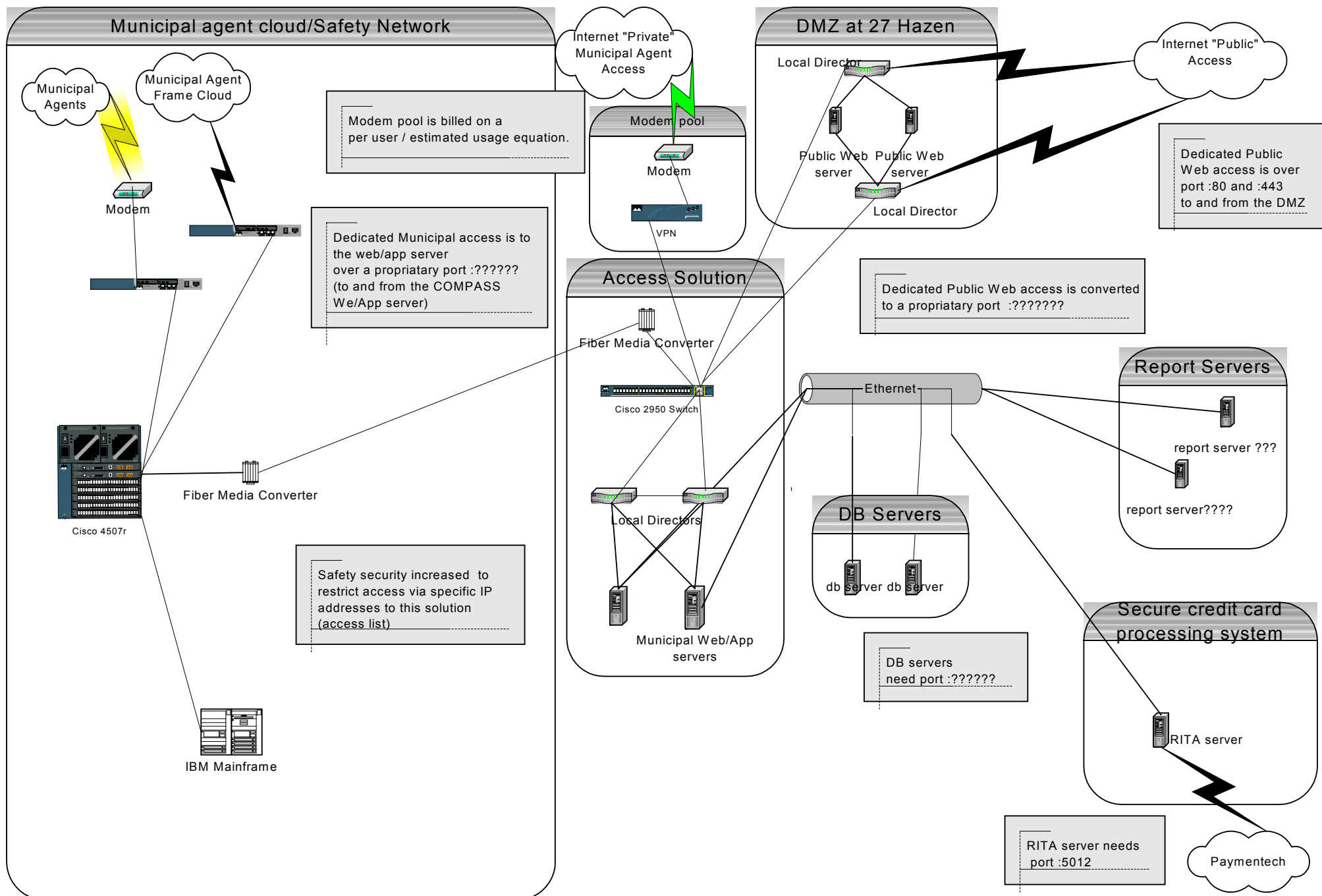
Created 03/09/2004

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## State of New Hampshire (modem/vpn access)

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